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**Title :** Why do dolphins jump?

**Category :** Behavior

**Student :** Not Applicable

**Preferred Format :** Oral Presentation

**Abstract :** A large group of about 400 dusky dolphins (*Lagenorhynchus obscurus*) was in September 2002 studied off Namibia, onboard R/V "Dr. Fridtjof Nansen". Digital video recordings were used to study dolphin behaviour. Five dusky dolphins were accidentally caught during a pelagic trawl haul targeting Cape horse mackerel (*Trachurus trachurus capensis*). A total of 59 specimens of *Xenobalanus globicipitis* (Crustacea: Cirripedia), size range 10-50 mm, were firmly attached to all five dolphins at the trailing margins of the fluke and the dorsal fin and the lower base of the flippers. This phoront has been reported from many toothed whales. Toothed whales are known to frequently jump out of the sea and land with a splash. By comparing the presence and position of the cirripeds with the jumping behaviour of the dolphins, we believe there is a causal relationship between these cirripeds and why dolphins jump. We recorded five distinct landing behaviours: 1) Synchronous jumps, head first touching the surface, 2) Twist body 90° - 180°, left or right, dorsal fin hitting surface, 3) Lifting frontal part of the body, flippers hitting first, 4) Dry and high somersault (1 1/2 loop), slapping fluke on impact, 5) Fast swimming at surface while performing powerful and frequent tail-slaps.

We hypothesise that the latter four aerial landing behaviours are linked to the presence and position of *X. globicipitis*. We believe that dusky dolphins jump in a predictable manner with very high precision, to get rid off irritating or annoying *X. globicipitis* attached to their skin at specific sites. The presence and position of *X. globicipitis* may thus explain why and how the dusky dolphins jump. This is to our best knowledge the first time a causal link has been proposed between the jumping behaviour seen in many dolphins and the presence and positions of "guests" phoronts on the skin. Although dolphin jumping may be social, sexual display or play behaviour, these hitch-hiker cirripeds may partly explain their jumps.